

**REMARKS**

Reconsideration of the above-identified patent application is requested in view of the remarks that follow.

In the October 12, 2004, Office Action in this application, the Examiner rejected claims 86-90, 93 and 94 under 35 U.S.C. 103(a) as being unpatentable over the Igarishi et al. reference in view of the Lin reference and the Tsukamoto reference and the Kata et al. reference. Claim 91 was rejected under 35 U.S.C. 103(a) as being unpatentable over Igarishi et al. in view of Lin and Tsukamoto and Kata et al. and further in view of the Pasch reference. Claim 92 was rejected under 35 U.S.C. 103(a) as being unpatentable over Igarishi et al. in view of Lin and Tsukamoto and Kata et al. and further in view of the Knapp et al. reference.

As indicated above, claims 86-94 have been cancelled. New independent claims 95 and 96 have been added. New independent claim 95 and 96 have been drafted after careful consideration of the Examiner's remarks in the October 12 Office Action. For the reasons set forth below, it is believed that claims 95 and 96 patentably distinguish over the reference combinations cited by the Examiner.

Each of Applicant's new independent claims 95 and 96 recites a glass sheet that is "substantially the same size" as the substrate wafer to which it is affixed. Each new claim also recites that the wafer scale glass sheet includes a plurality of prefabricated hole patterns; after the wafer scale glass sheet has been affixed to the wafer, each of the prefabricated hole patterns is associated with a corresponding die bond pad pattern formed on the semiconductor wafer.

The Examiner cites "prefabricated sheet 24" of the Igarishi et al. reference in combination with the Kata et al. reference as teaching the wafer scale glass sheet recited in Applicant's claims. As noted by the Examiner, the sheet 24 disclosed by Igarishi et al. is die size, not wafer size. To overcome this deficiency in the Igarishi et al. teaching, the Examiner relies on the Kata et al. teaching to extrapolate Igarishi et al.'s die size sheet to the solid, unitary, planar, prefabricated wafer scale glass sheet recited in Applicant's claims.

However, Kata et al. neither teach nor suggest a wafer size prefabricated glass sheet of any kind. Rather, Kata et al. teach formation of a passivating film on the surface of a wafer to fully cover the plurality of bond pad structures formed on the wafer surface. Although Kata et al. teach the utilization of “well-known techniques” for the formation of this passivating film, only spin-on techniques are specifically identified as utilizable for this purpose. Kata et al. then go on to teach the etching of the passivating film to create holes in the film to expose the underlying bond pads. That is, Kata et al. neither teach nor suggest the utilization of a unitary, solid, planar glass sheet having prefabricated hole patterns.

The Examiner states that it would have been obvious “to use the wafer scale technique of Kata et al.”, i.e. Kata et al.’s spin-on film technique, in the Igarishi et al. device “to gain the cost advantages of wafer scale processing.” The problem with this line of reasoning is that “the wafer scale technique of Kata et al.” is merely representative of the conventional spin-on technique for forming a passivating layer on a wafer structure. This very commonly-used and very well known technique involves depositing a drop of liquid passivating material at the center of the circular wafer and then spinning the wafer at high speed, thereby causing centrifugal forces to spread the liquid passivating material over the surface of the wafer. After the passivating material has been spread over the entire wafer, it is cured, resulting in a film that covers the entire surface of the wafer. As stated above, there are no prefabricated holes in the passivating film prior to its formation on the wafer. As discussed in the Kata et al. reference, a separate, subsequent etch step must be performed after the spin-on film is cured in order to expose the underlying die bond pads. In other words, the conventional spin-on passivating film taught by Kata et al. has absolutely nothing structurally in common with the prefabricated glass sheet recited in Applicant’s claims 95 and 96, i.e. “a unitary, substantially planar solid glass sheet having substantially the same size as the semiconductor wafer and having a plurality of prefabricated holes formed therethrough.”

The question regarding an obviousness rejection of a patent claim has for many years been “Does the combination of prior art applied against the claim suggest what is recited in the claim?” *In re Fridolph*, 134 F.2d 414 (CCPA 1943). Federal Circuit decisions have consistently confirmed this basic suggestion test. “Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application

of the requirement for a showing of the teaching or motivation to combine prior art references.” (underlining added) *In re Dembicza*k, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999) “To establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.” (underlining added) *In re Kotzab*, 208 F.3d 1365, 54 USPQ2d 1308 (Fed. Cir. 2000) “To establish a *prima facie* case of obviousness based on a combination of the content of various references, there must be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicant.” (underlining added) *In re Dance*, 160 F.3d 1399, 48 USPQ2d 1635 (Fed. Cir. 1998).

Applicant fails to find any teaching or suggestion in the Kata et al. “spin-on passivation film” reference to change Igarashi et al.’s die size insulating sheet to the specific combination that includes a wafer size glass sheet having prefabricated hole patterns that correspond to multiple bond pad patterns on a semiconductor wafer, as specifically recited in Applicant’s new claims 95 and 96.

For the reasons set forth above, Applicant is of the good faith belief that all claims now present in this application patentably distinguish over the prior art. Therefore, it is requested that this application be passed to allowance.

Respectfully submitted,

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